

## **Executive Summary**

### **Land Use Assumptions & Capital Improvements Plan Sanitary Sewer Service Area "03-02"**

The following report was written to serve as the Land Use and Capital Improvement Plan for Sanitary Sewer Service Area "03-02" as shown on Exhibit 1. The service area is located just west of Wellborn Road between FM 2818 (Harvey Mitchell Parkway) and Rock Prairie Road. Sanitary Sewer Service Area "03-02", as shown in Exhibit 2, currently consists of approximately 715 acres of agricultural, industrial, low and medium density residential and institutional uses.

The land use assumptions, as shown herein, are based on the City's Comprehensive Land Use Plan and the history of development in this portion of the City over the past eight years. Projecting a slightly higher than average growth rate as determined from the past eight years growth rate to the next ten year period (2013) would result in the addition of approximately 1,100 new dwelling units (ranging from low to high density) to the Sanitary Sewer Service Area "03-02". The high density residential in the area has been estimated at 8 dwelling units per acre, medium density residential with a density of 4 dwelling units per acre, low density residential with a density of 1 dwelling units per acre, and rural residential with a density of 0.25 dwelling units per acre.

It is projected that high density residential areas will fully develop in the "03-02" service area during the first ten year growth window ('03-'13). Although not projected as an individual land use category on the land use plan for area "03-02", it is assumed that one-half of the transitional land use categories will develop as attached residential housing within the transitional land use areas along Wellborn Road. Commercial and retail properties at the intersection of Cain Road and Wellborn Road as well as those at the intersection of Gandy Road and Wellborn Road are anticipated to build out in the first ten year ('03-'13) growth window. Current rapid development of the Steeplechase Subdivision is expected to continue and will prompt the development of a portion of the retail regional properties in the first ten year ('03-'13) time frame. Additional retail and commercial properties further away from these main intersections are projected to develop after this first ten year ('03-'13) period.

Due to unknown rail and SH40 alignments, it is anticipated that a small percentage of the industrial tracts along FM 2818 will develop in the first ten year growth window. Industrial land use areas at the intersection of Gandy and Wellborn Road are already platted, and some development has already commenced. This area is expected to develop fully in the first ten year period ('03-'13). It is believed that smaller transitional land use tracts in the service area will develop in the first ten year period ('03-'13).

The Capital Improvement Plan for Sanitary Sewer Service Area "03-02" was developed using the Land Use Assumptions for the service area. The sewerlines that will be extended to serve this area consists of a single major trunk line and two collection lines which extend north and south along Wellborn Road/FM 2154. These two collection lines will feed into the larger trunk line which will connect to the existing eighteen inch (18") sanitary sewerline in the Steeplechase subdivision and will run east/west along Sallie Lane from the Steeplechase Subdivision to

Wellborn Road. The trunk line consists of approximately 2000 linear feet of eighteen inch (18") sewerline, the north collection line consists of 2270 linear feet of twelve inch (12") line, and the south collection line consists of 6070 linear feet of fifteen (15") and twelve (12") inch line. The southern collection line runs parallel to Wellborn Road for 3860 linear feet, of which 2025 linear feet is fifteen inch (15") sewerline and the remainder is twelve inch (12") sewerline. At the end of this segment, the twelve inch (12") line turns southwest for 980 linear feet, then southeast for 1225 linear feet ending at the southeast side of Gandy Road approximately 1000 feet west of Wellborn Road. These three sanitary sewerlines are located such that they will serve the entire "03-02" service area, as seen in Exhibit 4. The preliminary estimated project cost is \$1,596,137. These costs include engineering and design, land acquisition, and construction costs.

The estimated costs that are calculated within the Capital Improvement Plan are reduced by the utility service revenues generated by the new service units which are used to repay debt service. These fees are then proportioned by the ratio of new Living Unit Equivalents (LUE's) to the total Living Equivalents served. This calculation results in the maximum allowable impact fee per unit. Below is the estimated eligible cost, cost allocation factor, maximum 10-year recoverable cost, utility revenue and ad valorem tax credits, and maximum impact fee allowable for Sanitary Sewer Service Area "03-02".



### Estimated Eligible Cost

Construction Cost	\$1,269,717
Engineering/Survey/Geotechnical	\$190,457
Land Cost	\$104,863
Impact Fee Preparation	<u>\$31,100</u>
Total Eligible Cost	\$1,596,137

### Cost Allocation

Total New LUE's.....	3660
Total LUE's Served .....	4285
Cost Allocation Factor .....	$3660/4285 = 0.85$
Maximum Recoverable Cost.....	$0.85 * \$1,596,137 = \$1,356,716$

### Maximum 10-Year Recoverable Cost

Projected LUE's 2003-2013 .....	1641
Projected LUE's after 2013 .....	2019
Total New LUE's.....	3660
Service Distribution %.....	$100 * (1641/3660) = 45\%$
Maximum 10-Year Recoverable Cost .....	$45\% * \$1,356,716 = \$610,522$

### Utility Revenue & Ad Valorem Tax Credits

Utility Revenue Per LUE Applied to Capital Improvements .....	\$50
Total Utility Revenue Credit <sup>i</sup> .....	$\$50 * 1641 = \$82,000$
Ad Valorem Tax Applied to Capital Improvements.....	\$0

<sup>i</sup> Revenue credit on new LUE's associated with 10-year ('03-'13) growth window (service time frame)

Number of New LUE's<sup>ii</sup> .....1641

**Impact Fee Calculation**

**Maximum Impact Fee =**  $\frac{\text{Maximum 10-Year Recoverable Cost} - \text{Total Utility Revenue Credit}}{\text{Number of new LUE's}}$

Maximum Impact Fee = $(\$610,522 - \$82,000) / (1641 \text{ LUE's}) = \$322.07/\text{LUE}$
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<sup>ii</sup> Number of new LUE's associated with 10-year growth window ('03-'13)